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SCIENCE

FRIDAY, MARCH 18, 1910

THE PROBLEM OF THE ASSISTANT
PROFESSOR

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PART I

THERE has been for some years a growing appreciation among educational institutions of the fact that their problems are not entirely individual, but present many aspects in common, and that much good may come from joint effort toward their solution. The very existence of this association sufficiently demonstrates this fact, and also amply justifies the aim of this paper. The topic offers material for a volume; the limitations of space and time for preparation have made the task of presentation chiefly one of selection and manner. The prime effort has been directed toward stating the problem of the assistant professor in concrete terms, and the method adopted may be likened to that of composite photography. Its limitations are obvious, but it has the advantage of focusing well on the main features, while enabling one to treat individual data without danger of personal identification.

A questionnaire (Appendix A) was prepared and sent out to approximately 250 of the men holding the rank of assistant professor in the 22 institutions represented in this association. When replies had been received to about one half (120) of these, the writer felt forced to begin his work of compilation, in order that in the time at his disposal he might complete the collation, and have a definite result to present in this paper. Replies have continued, but they run just about the same as those here considered, and in no manner call for any essential modification of the general re-

sults. Casting out replies of those whose service was but for part time and special in kind (chiefly those holding clinical positions with nominal salaries and slight administrative connection), there remained 112 replies from 20 institutions. The initial step was to tabulate the answers to the first 17 questions, and from that tabulation the following results were compiled. The first point is that of the present age of the men replying. Table I. gives the result:

TABLE I
Present Age of Assistant Professors
(Two Replies Blank)

Age	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	51	58
Number	1	0	1	6	5	4	8	6	5	6	10	10	4	6	4	7	1	6	5	2	2	5	1	1	2	1	1
	Group 1																Group 2										
	36 median age. 52 under, 48 over.																24.6 per cent. of total.										
	Average age, 36.8 years.																										

TABLE II
Age at Appointment as Assistant Professor
(Five Replies, Age not Given)

Age	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	47
Number	2	4	1	6	12	9	10	8	10	10	6	6	7	4	2	1	1	1	1	2	1	2	1
	Group 1															Group 2							
	31 median age. 52 under, 45 over.															9.33 per cent. of total.							
	Average age at appointment, 31.25 years.																						

The average age is 36.8 years; 36 may also be considered the median age, as 52 of the men were under this age, while 58 were 36 years or older. Two did not state their age. Just here I wish to call attention to evidence offered by this table on an important point. The men fall into two main groups, one under 40 and one over 40. The existence of this second group (24.6 per cent. of the total) with ages running from 40 to 58, points decidedly toward the existence of a class of permanent assistant professors. This is an important matter, and must seriously modify the prevailing view that assistant professors are young

men temporarily occupying the rank on their march toward full professorship. If this point be well taken—and the writer fully believes it so to be—an entire readjustment of attitude toward the assistant professor is due. Compensation based upon the old conception will be found inadequate, and old forms of faculty organization and departmental administration will be found unduly repressive and subordinating toward amply tried and experienced men.

Bearing further on this point of age is Table II., which shows the age at which these men attained assistant professorship.

The average age of appointment is 31.25 years. 31 is also the median age, 52 being appointed at an earlier age than this and 55 at this or a later one. In considering some of the subsequent facts, it may be well to bear in mind that the years from 31 to 37 may properly be regarded as the cream of a man's life. "Who is not at twenty, *does* not at thirty, *has* not at forty, never will be, do, or have."

The average time spent in collegiate or graduate study has been 6.9 years. Seven-

teen men (15 per cent.) hold the degree of bachelor only; 28 (25 per cent.) hold none above master; while 65 (58 per cent.) hold that of doctor. Two only, whose work is in a special branch of technology, hold no degree.

63.5 per cent. received assistance in pursuing their studies, in the form of scholarships, fellowships, teaching fellowships, assistantships, student instructorships, etc. The amount varied from a single year's free tuition to a net equivalent of \$2,000. No average can be struck of these or of their financial value. 36.5 per cent. received no such aid. 53.5 per cent. incurred no indebtedness for their education. 46.5 per cent. did incur such indebtedness, the average amount being \$885. Of those who incurred this indebtedness, 82 per cent. have discharged it. The average sum was \$800, and the average time required was 3.6 years. The remaining 18 per cent., whose debt average \$1,261, have not yet succeeded in paying it off, although in some cases it has been running six, eight and even ten years. The depressing nature of such a burden need not be dwelt upon.

With the facts before him which these replies have brought, the writer is deeply impressed by the deplorable effect of the system of scholarships, etc., which do not entirely support the recipient, but act as bait and encourage him to go on with graduate study, while piling up an indebtedness which, under prevailing conditions, will ride his shoulders like a veritable old man of the sea. It is a good way to break hearts.

These histories disclose the fact that it is a pretty serious matter for a man to go even \$1,000 into debt in order to enter the career of university teaching. The *manipulation* of fellowships for the purpose of "building up a strong (*i. e.*, large) graduate department" lies dangerously near the

immoral; and this is doubly true when the fellowship carries with it burdensome teaching duties which make of it but a disguised, underpaid instructorship. This is making one hand wash the other in a way worthy of financial wizards. Nor can the practise of some professors of looking upon "their" fellows as a sort of intellectual valets, be too strongly condemned. A genuine fellowship will carry sufficient stipend to bear the entire burden of the recipient's cost of living on a modest scale, leave his time wholly free for his studies, and will take its sole return in deferred service to be rendered to society at large.

We next come to the question of the professorial experience of these men. The total teaching service in all ranks averages 10.3 years. Nine years is the medium period, just half having served a shorter time, and the other half a longer time than this. On the average they have served $5\frac{1}{2}$ years in the rank of assistant professor; 5 years is also about the median period, 53 per cent. having served a shorter term and 47 per cent. 5 years or more. Twelve per cent. have held the rank for ten years or more. This service is shown in Table III.

TABLE III
Years of Service as Assistant Professor
(One Reply Lacking)

Years	1	2	3	4	5	6	7	8	9	10	11	12	16	18	30
Number	11	20	17	10	14	6	7	7	6	4	1	5	1	1	1
	58										53				
	under 5 years.										5 years or over.				

Of the 112, 83 (74 per cent.) are married and 29 (26 per cent.) are unmarried. Table IV. shows the number and distribution of children in this group of men. No comment, beyond a reminder that the average age of these men is 36.8 years, is necessary.

The present average salary is \$1,790.

TABLE IV
Number and Distribution of Children

		Total Children
Number having 0 child,	23	0
Number having 1 child,	26	26
Number having 2 children,	19	38
Number having 3 children,	12	36
Number having 4 children,	1	4
Number having 6 children,	1	6
Number having 7 children,	1	7
	83	117

$117/83 = 1.4$ to the family of each married.

The median salary is \$1,800, 21.5 per cent. receiving just this sum, 46 per cent. receiving less and 33.5 per cent. more. The average salary for the entire 10.3 years of teaching service is \$1,325. (An interesting check on this is the writer's average of \$1,328.15 for his first nine years of service, reported in the *Atlantic Monthly*, May, 1905.)

Now let us focus these facts into our composite representative man. At the age of 26 or 27, after seven years of collegiate and graduate study, involving not only considerable outlay but also the important item of the foregoing of earning during this period, he is the proud possessor of his Ph.D. and is ready to enter his profession. The next five years he spends as instructor. In his thirty-second year he reaches an assistant professorship. He is now in his thirty-seventh year, having been an assistant professor for five years. His average salary for the ten years has been \$1,325, which compares favorably with that of the good mechanic, but scarcely with that of men in those trained professions requiring equally arduous and expensive preparation. At thirty-seven he is married, has one child, and a salary of \$1,800. These are men in twenty of the leading universities, located for the greater part in or near the larger cities!

An average salary of \$1,325 for the

years of a man's life between 27 and 37 is scarcely one to favor a broadening contact with life, the purchase of books, travel, association with cultivated men outside of academic ranks, etc. The most that can be said is that it may suffice for an unmarried man with no one dependent upon him. But three fourths of these men are married. Says one of these: "Previous to marriage my salary was sufficient to keep me comfortably. Since marriage, *in spite of* keeping boarders, I have fallen behind."¹

It is therefore not at all astonishing to find that 80 per cent. have supplemented their salary with income from outside sources. No complete average can be struck, as the replies included such answers as "to a considerable extent," etc. The amount when stated (as it was in 75 cases) varied from a sum of \$15 total to an independent annual income of \$10,000 and averaged 28.7 per cent. of the salary. Omitting two exceptionally high cases, it was about 25 per cent.

The necessity to supplement the salary with outside income is evident from the fact that eight men report themselves running behind even on total income, while practising strictest economy. Light

¹ Compare President Eliot: "He should receive [on appointment] as assistant professor a salary which will enable him to support a wife and two or three children comfortably, but without luxuries or costly pleasures. It is well to have the appointment of assistant professor given for a fixed term of years, as, for example, five. If, at the end of his first term as assistant professor, a second appointment with the same title be given, a moderate advance of salary should accompany the second appointment. By the time the end of a second term as assistant professor is reached, the candidate for further employment in the university will be approaching forty years of age, and is ready for a full professorship" ("University Administration," p. 13). The age of appointment averages 31.25 years. Two five-year terms bring him to 41.25.

is thrown on the question, and on that of standard of living, by the following replies to the query whether the total income was sufficient, or whether they were running behind. The answers are here set down exactly in order of the tabulation. "Running even, with aid of fortunate real-estate venture on borrowed capital. Felt forced to do this." "Salary alone would not suffice to cover expenses of living with any manner of comfort." "Sufficient" (has private capital). "I keep even, but could not do it on my salary." "Can barely make both ends meet now" (in debt \$1,000). "Ends compelled to meet under present method of living." "When debt incurred for study is paid, I think my income will do a little better than make both ends meet." (It would be cruel to shatter the hope. This is a young man, recently married, no children.) "Sufficient" (unmarried, supplements salary 25 per cent.). "Annual saving \$500 on close living" (supplements salary 12 per cent.). "Must depend on outside sources." "Total just sufficient" (married, three children, salary \$2,400). "Sufficient" (recently married). "Have had to earn outside to make income equal expenses." "Barely sufficient" (married, no children). "Running behind, \$1,000 insurance recently abandoned, from inability to meet premiums" (married, two children, net indebtedness \$1,094.70). "Just even with aid from other sources." "If I can keep expenses practically stationary, expect to pay debts in seven to ten years" (present indebtedness \$2,053.50). "Both ends meet" (married, no children). "Have kept even, owing to remarkable freedom from sickness in family and to consistent self-sacrifice on the part of my wife." "It is against my principles to run behind, but neither can I get ahead on present salary (\$1,350) or furnish necessary books and

equipment to make my time count as it should." "Barely sufficient" (married, no children). "Can now make ends meet with difficulty." "Running behind a little" (present indebtedness \$2,500). "Since marriage I have fallen behind." "Am making both ends meet, but it costs self-denial in buying books, etc." (married, no children, salary \$1,200). "Salary would not support even my small family in ———. Saved a little when I wasn't teaching." And about forty more replies of the same tenor.

To complete the picture of the present financial status of these men: Seventeen men show an average net indebtedness of \$1,019. The details are given in Table V.

TABLE V
Table of Net Indebtedness

	Amount	Single	Married	Children
1	\$2,000.00		1	1
2	1,000.00		1	1
3	175.00		1	0
4	2,100.00		1	3
5	1,094.70		1	2
6	2,053.50		1	2
7	150.00	1		—
8	650.00		1	0
9	2,500.00		1	1
10	700.00	1		—
11	500.00		1	3
12	150.00		1	3
13	250.00	1		—
14	200.00	1		—
15 ²	600.00	1		—
16	1,500.00		1	0
17	1,700.00		1	3
	\$17,323.20	5	12	

Average, \$1,019.

Forty-three men show an average saving from salary of \$1,765. The details are shown in Table VI. (From this table have been omitted two cases reported of saving from business ventures—one of \$15,000 and one of \$30,000.)

The remaining 52 report themselves as just even or make no comment. If we sub-

² Parents.

TABLE VI
Savings from Salary

	Amount	Single	Married	Children
1	\$2,000.00	1		—
2	400.00		1	0
3	2,500.00		1	1
4	1,000.00		1	0
5	300.00	1		—
6	200.00		1	1
7	600.00	1		—
8	1,500.00		1	0
9	500.00	1		—
10	2,000.00	1		—
11	500.00		1	0
12	1,800.00	1		—
13	800.00		1	1
14	7,000.00		1	3 ³
15	800.00		1	2
16	2,500.00	1		—
17	1,200.00		1	3
18	650.00		1	1
19	1,000.00		1	1
20	1,500.00		1	0
21	2,000.00	1		—
22	3,000.00	1		—
23	7,000.00		1	0
24	5,000.00	1		—
25	3,500.00		1	2
26	300.00	1		—
27	750.00		1	0
28	4,000.00		1	0
29	6,000.00		1	7 ⁴
30	1,000.00		1	0
31	200.00		1	0
32	500.00		1	2
33	300.00		1	2
34	2,000.00	1		—
35	710.00		1	1
36	1,200.00	1		—
37	400.00		1	0
38	400.00	1		—
39	1,150.00	1		—
40	300.00		1	0
41	1,250.00		1	2
42	700.00	1		—
43	5,500.00		1	2 ⁵
Total	\$75,910.00	16	27	

Average, \$1,765.

tract the reported total deficit from the reported total saving from salary and divide by 112, the number of replies received, the average net saving per man for 10.3 years teaching service is \$559.

Twenty-five carry no life insurance, 86 carry an average of \$4,831. With a grim

* Not a college graduate.

* Salary, \$4,000

* Salary, \$2,250. Supplemental, 30 per cent.

humor, one man who carries \$6,000 insurance comments: "I seem to be worth more dead than alive." Nine report accident insurance in addition, an average of \$4,445.

The table of savings from salary is scarcely less significant than that of deficits. Surely no demonstration is needed that the present scale of salaries in this rank is only sufficient to provide a modest living for a single man. Remember that the average salary during the ten years of service has been but \$1,325, and the present salary for men of 37 years of age averages \$1,800. The married men must supplement their income as best they may to make both ends meet—the salaries are insufficient to do it, on the scale of living demanded of them by their position and training.

Such divided efforts can not fail to affect not merely their further development, but their continuing efficiency. This problem of salaries is grave, and the possibility of readjustment worthy of most serious consideration by the administrative authorities. Particular attention may be called to the need for special consideration of those men in this rank who have passed their fortieth year—the possibly existing class of permanent assistant professors.

The rapid increase in the cost of living, in the past twenty years, has made the situation acute; for there has been no general increase of salaries commensurate with this, and as a consequence these men find themselves driven to a lower and lower standard of living. This is a grave menace to the efficiency of the institutions both present and future, for it must not be forgotten that the higher ranks must be recruited from time to time from men whose development has necessarily been limited by the conditions surrounding this rank.

STANFORD UNIVERSITY GUIDO H. MARX

(To be continued)